AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A remote management method for performing remote management of a processor which processes and outputs a processing object, comprising the steps of:

recording operation information about contents of operation performed by the processor during a preset time period or a preset number of executions of processing existing between start of the operation of the processor and end of the operation;

forming an operation log by combining the operation information recorded in the recording step; and

transmitting the thus formed operation log to a remote management apparatus connected to the processor by a communication line,

wherein the remote thus management apparatus performs the remote management of condition of the processor based on the transmitted operation log.

2. (original): The remote management method according to Claim 1, wherein an error log in which is recorded information about occurrences of errors having occurred in the processor during said preset time period or said preset number of executions of the processing existing between the start and the end of the operation of the processor is

transmitted together with the operation log.

3. (original):The remote management method according to Claim 1, wherein the forming step of the operation log and the

transmitting step of the operation log to the remote management apparatus are performed at the end of the operation of the processor or by an instruction from an operator.

4. (currently amended): The remote management method according to Claim 1, wherein the recorded operation information is operation information during and entire time period ~~form~~ from the start and the end of the operation of the processor ~~to the end thereof~~.

5. (original): The remote management method according to Claim 2, wherein one of the operation log and the error log is converted into binary data to be transmitted by electronic mail.

6. (original): The remote management method according to claim 1, wherein the operation log having the operation information recorded therein includes one of number of used times, a used time, and a used quantity of a component or a

consumable article that is used in the processor.

7. (original): The remote management method according to Claim 6, wherein the remote management apparatus performs management of one of a performance of the component and the amount of residual quantity of the consumable article according to a result of totalization of one of the number

of used times, the used time, and the used quantity of the component or the consumable article which is included in the operation log transmitted.

8. (original): The remote management method according to Claim 1, wherein the remote management apparatus transmits notification information to the processor if the need arises.

9. (original): The remote management method according to Claim 8, wherein, if the notification information is upgrading setting information on software provided in the processor, setting of the processor is automatically updated in accordance with the setting information.

10. (original): The remote management method according to Claim 2, wherein the remote management apparatus transmits notification information to the processor if the need arises, and wherein, if the error log and the operation log are transmitted from the processor to the remote management apparatus, the remote management apparatus analyzes a cause of occurrence of the error based on the error log and the

operation log, and transmits one of an analysis result and an instruction to deal with the error.

11. (original): The remote management method according to Claim 1, wherein the remote management apparatus performs remote diagnosis by remote controlling the processor after confirming that the processor is not operating for preset processing, and by checking the operation of the processor.

12. (original): The remote management method according to Claim 11, wherein the remote management apparatus previously transmits, as notification information, a date and a time for remote diagnosis of the processor.

13. (original):The remote management method according to Claim 1, wherein the processor comprises an image output apparatus which obtains, as input image data, image data from an image recording medium, and which processes the input image data by preset image processing to output one of output image data and an output image.

14. (original):The remote management method according to Claim 13, wherein the image recording medium is one of a film on which an image is photographed and a digital image recording medium on which image data is recorded,

wherein number of executions of processing from the film or number of executions of processing from the digital image recording medium in the image output apparatus is totalized discriminably with respect to kinds of film or kinds of digital image recording medium, and

wherein one of number of images of the output image and number of image data of the output image data is totalized discriminably with respect to image sizes of the output image or data sizes of the output image data, the contents of operation of the image output apparatus being controlled by the totalization.

15. (original):The remote management method according to Claim 13, wherein number of executions of the preset image processing is counted with respect to contents of the preset image processing, and information on the number of executions of the preset image processing is contained in the operation log.

16. (original):The remote management method according to Claim 14, wherein a charge for use is obtained from the number of executions of the processing and charging information on the processing for each image.

17. (original): The remote management method according to Claim 13, wherein the processor has a registered template images, and the preset image processing includes processing for compositing a template image of the registered template images and an image of the input image data.

18. (original): The remote management method according to Claim 17, wherein image data on the template image is transmitted from the remote management apparatus over a communication line.

19. (previously presented): A remote management system comprising:

at least one processor for processing and outputting a processing object; and

a remote management apparatus connected to the processor by a communication line, said remote management apparatus performing remote management of the processor,

wherein the processor comprises:

an input section for inputting said processing object;

a processing section for performing preset processing on the processing object;

an output section for outputting a result-of the preset processing performed by the processing section;

an information recording section for recording and holding operation information about contents of operation performed by the processor during a preset time period or a preset number of executions of processing existing between start of the operation of the processor and end of the operation; and

a first control and connection device for forming an operation log from the operation information recorded by the information recording section, said first control and connection device being connected to the remote management apparatus by the communication line to transmit the operation log, and

wherein the remote management apparatus comprises:

a second control and connection device connected to the processor by the communication line; and

remote management device for performing remote management of an operating condition of the processor by using the operation log transmitted from the second control and connection device.

20. (original):The remote management system according to Claim 19, wherein the information recording section records and

holds error occurrence information about occurrences of errors having occurred in the processor during said preset

time period or said preset number of executions of processing existing between the start and the end of the operation of the processor, and

wherein the first control and connection device forms an error log from the error occurrence information recorded by the information recording section, and transmits the error log and the operation log to the remote management apparatus.

21. (original): The remote management system according to Claim 19, wherein said first control and connection device performs formation of the operation log and transmission of the operation log to the remote management apparatus at the end of the operation of the processor or by an instruction from an operator.

22. (original): The remote management system according to Claim 19, wherein the processor comprises an image output apparatus which obtains, as input image data, image data

from an image recording medium, and which processes the input image data by preset image processing to output one of output image data and an output image.

23. (original): The remote management system according to Claim 20, wherein, if the error log in which the error occurrence information is recorded and the operation log in which the operation information is recorded are transmitted from the processor to the remote management apparatus, the remote management device analyzes a cause of occurrence of the error based on the error log and the operation log, and transmits one of an analysis result and an instruction to deal with the error to the processor.

24. (original): The remote management system according to Claim 19, wherein the remote management device performs remote diagnosis by checking the operation of the processor by means of remote controlling the processor.

25. (original): A remote diagnosis method for performing remote diagnosis of an image output apparatus which obtains input image data, performs desired image processing on the input image data, and outputs at least one of an output image and output image data, comprising the steps of:

setting, as image data to be transferred, at least

one of the input image data, image data on the output image, the output image data, and processed image data obtained when at least one of the output image and the output image data is obtained from the input image data;

setting, as information to be transferred, at least one of image processing component information acquired in a process of obtaining at least one of the output image and the output image data from the input image data, information on management of the image output apparatus, and error occurrence information about occurrence of an error in the image output apparatus;

transferring the image data to be transferred and the information to be transferred to the remote diagnosis apparatus connected by using a communication line; and

performing remote diagnosis of the image output apparatus in the remote diagnosis apparatus by using the transferred image data and the transferred information.

26. (original): The remote diagnosis method for the image

output apparatus according to Claim 25, wherein the remote diagnosis apparatus has a standard reproduction processing device for performing standard reproduction of at least one of the output image and the output image data of the image output apparatus by using the transferred image data and the transferred information, and

wherein the remote diagnosis apparatus performs remote diagnosis of the image output apparatus based on results of the reproduction performed by the standard

reproduction processing device.

27. (original): The remote diagnosis method for the image

output apparatus according to Claim 25, wherein remote

diagnosis of the image output apparatus is performed when at least one of a defective output image and defective output image data is obtained or by an instruction from the remote diagnosis apparatus in accordance with an operating condition of the image output apparatus.

28. (original): The remote diagnosis method for the image output apparatus according to Claim 25, wherein the input

image data is at least one of image data obtained by photoelectrically reading an image recorded on a film, image data obtained by reading from a digital image recording medium, and image data supplied by transfer *over* the communication line.

29. (original): The remote diagnosis method for the image output apparatus according to Claim 25, wherein the image

output apparatus includes a print output section for recording on photographic printing paper or a heat development sensitive material, and

wherein the output image data is image data converted to be adapted to the print output section.

30. (original): The remote diagnosis method for the image

output apparatus according to Claim 25, wherein the image output apparatus includes a print output section for recording on photographic printing paper or a heat development sensitive material, and an output image reading section for reading an output image printed and outputted by the print output section, and

wherein the output image data is image data read by the output image reading section.

31. (original): The remote diagnosis method for the image output apparatus according to Claim 30, wherein the output image reading section comprises a reflection-type scanner.

32. (original): The remote diagnosis method for the image output apparatus according to Claim 31, wherein the reflection-type scanner reads a print image and outputs a reproduced print image.

33. (original): The remote diagnosis method for the image

output apparatus according to Claim 25, wherein the image output apparatus includes one of a writing unit-for writing image data on a digital image recording medium and a communication device for establishing a connection to the communication line to perform transmission, and

wherein the output image data is one of image data written to the digital image recording medium and image data transmitted to a desired destination through the communication device.

34. (original): The remote diagnosis method for the image output apparatus according to Claim 25, wherein at least one of the input image data corresponding to at least one of the output image data and the output image, the processed image data, and the image processing component information is acquired by relating one of a frame number recorded on the image recording medium and a file name of the input image data recorded on the digital image recording medium, to one of back print information for the output image printed and output and a file name of the outputted image data.

35. (original): The remote diagnosis method for the image

output apparatus according to Claim 34, wherein, if the image recording medium is an APS film, a film ID number can be included as an item to be related in addition to the frame number.

36. (original): The remote diagnosis method for the image output apparatus according to Claim 25, wherein the image data to be transferred and the information to be transferred are transferred over the communication line as a file attached to a piece of electronic mail.

37. (original): The remote diagnosis method for the image

output apparatus according to Claim 25, wherein the image processing component information includes at least one of image reading information when the input image data is obtained, image processing information when the image processing is performed, transport and exposure information when print outputting is performed in the print output section, development information when print outputting is performed in the print output section, and

output image reading information when reading is performed in the output image reading section.

38. (original): A remote diagnosis system for an image output apparatus, comprising:

at least one image output apparatus which obtains input image data, performs desired image processing on the input image data, and outputs at least one of an output image and output image data; and

a remote diagnosis apparatus connected to the image output apparatus by a communication line, remote diagnosis of the image output apparatus being performed by using the remote diagnosis apparatus,

wherein the image output apparatus comprises:

an image input section for obtaining the input image data;

an image processing section for performing image processing on the input image data;

an image output section for outputting the output image data and the output image from the image data processed by image processing performed by the image processing section;

a storage section for recording and holding at least one of the input image data, the image data obtained by the image processing section, the output image data and image data on the

output image, and at least one of image processing component information obtained by at least one of the image input section, the image processing section

and the image output section, information on management of the image output apparatus, and error occurrence information on occurrence of an error having occurred in the image output apparatus; and

a control and communication device for reading out

the image data recorded and held in the storage section and corresponding to at least one of the output image data and the output image, for forming image data to be transferred, by compositing the read-out image data and at least one of the output image data and the image data on the output image, for reading out at least one of the image processing component information, the management information and the error occurrence information recorded and held in the storage section and corresponding to at least one of the output image data and the output image, fox setting the read-out information as information to be transferred, and for transferring the image data and the information to be transferred, the image data and the information being transferred to the remote diagnosis apparatus over the communication line, and

wherein the remote diagnosis apparatus comprises:

a communication device for establishing a connection to the image output apparatus through the communication

line; and

a remote diagnosis device for performing remote diagnosis of the image output apparatus by using the image

data and the information transferred through the communication device.

39. (original): The remote diagnosis system for the image output apparatus according to Claim 38, wherein the remote diagnosis apparatus has a standard reproduction processing device for performing standard reproduction of one of the output image data and the output image of the image output apparatus by using the transferred image data and the transferred information, and

wherein the remote diagnosis apparatus performs remote diagnosis of the image output apparatus on the basis of the results of the reproduction processing performed by the standard reproduction processing device.

40. (original): The remote diagnosis method for the image output apparatus according to Claim 38, wherein remote diagnosis of the image output apparatus is performed when at least one of a defective image and defective image data is outputted from the image output apparatus.

41. (new): The method of claim 1, wherein the remote management apparatus provides return data to the processor via the communication line to correct the condition of processor operation by modifying a feature of the processor using the return data.

42 (new): The system of claim 19, wherein the remote management apparatus provides return data to the processor via the communication line to correct the condition of processor operation by modifying a feature of the processor using the return data.